



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CINCINNATI PROCUREMENT OPERATIONS DIVISION
CINCINNATI, OHIO 45268**

SUBJECT: Request for Task Order Proposal, Tracking Number PR-R2-19-00265

FROM: Lawrence Edelman
Contracting Officer

TO: Multiple Award Contract Holders under TSAWP II

Attached is request for task order proposal for the subject tracking number which is issued for competition for the project entitled, Saddle River Water Quality Modeling Project in NJ WMA 4".

The government requests you prepare a proposal (cost and technical) for the task order. Request the proposals be submitted to edelman.lawrence@epa.gov by 3:00 PM ET on 12 June 2019. The technical proposal is limited to 5 pages. The cost proposal should include prime direct labor, contract approved indirect rates, subcontractor detail, ODCs, and fee. Subcontractor proposals may be submitted directly to the EPA. Proposals shall also include the required conflict of interest certification.

The following documents provided for this solicitation will become part of the Task Order Award:

- Performance Work Statement
- Task Order Clauses

Award of a Cost Plus Fixed Fee - Term task order will result. The period of performance for this Task Order is one (1) twelve (12) month Base Period plus two (2) twelve (12) month Option Period. Please see attached technical evaluation criteria which will be used to evaluate the offer. Award will be made on a selection of the technically acceptable proposal with the lowest evaluated cost/price.

Any questions should be directed to edelman.lawrence@epa.gov within five days of issuance of this solicitation.

A handwritten signature in black ink, appearing to read "Lawrence B. Edelman", is positioned above the printed name.

Lawrence B. Edelman
Contracting Officer

Cc:
Danita Bowling, Contract Level COR
Damon Highsmith, Alternate Contract Level COR
Sandy Licis, Contracting Officer

1552.217-71 OPTION TO EXTEND THE TERM OF THE CONTRACT-COST-TYPE CONTRACT (APR 1984)

The Government has the option to extend the term of this contract for two (2) additional period(s). If more than 30 days remain in the contract period of performance, the Government, without prior written notification, may exercise this option by issuing a contract modification. To exercise this option within the last 30 days of the period of performance, the Government must provide to the Contractor written notification prior to that last 30-days of the period. This preliminary notification does not commit the Government to exercising the option. Use of an option will result in the following contract modifications:

(a) The "Period of Performance" clause will be amended to cover a base period and option periods:

	Period Start Date	End Date
Base Period	Award	– 07/15/2020
Option Period 1	07/16/2020	– 07/15/2021
Option Period 2	07/16/2021	– 07/15/2022

(b) Paragraph (a) of the "Level of Effort" clause will be amended to reflect a new and separate level of effort of:

Period	Level of Effort
Base Period	TBD
Option Period 1	TBD
Option Period 2	TBD

(c) The "Estimated Cost and Fixed Fee" clause will be amended to reflect increased estimated costs and fixed fee for each option period as follows:

Period	Estimated Cost	Fixed Fee	Total CPFF
Option Period 1	TBD	TBD	TBD
Option Period 2	TBD	TBD	TBD

(d) If the contract contains "not to exceed amounts" for elements of other direct costs (ODC), those amounts will be increased as follows: N/A

LOCAL CLAUSES EPA-B-32-101 LIMITATION OF FUNDS NOTICE

(a) Pursuant to the Limitation of Funds clause, incremental funding in the amount of **\$TBD** is allotted to cover estimated cost. Funding in the amount of **\$TBD** is provided to cover the corresponding increment of base fee. The amount allotted for costs is estimated to cover the contractor's performance through **TBD**

(b) When the contract is fully funded (i.e. the sum of the total estimated cost, base fee, award fee pool available for award, and award fee awarded, as set forth in the schedule of this contract), the Limitation of Cost clause shall become applicable.

(c) Recapitulation of Funds

LOCAL CLAUSES EPA-B-16-102 ESTIMATED COST AND FIXED FEE

- (a) The estimated cost of this contract is **TBD**
- (b) The fixed fee **TBD**
- (c) The total estimated cost and fixed fee is **TBD**

LOCAL CLAUSE EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Task Order COR (TOCOR): Antony Tseng, tseng.antony@epa.gov PH 212-637-3777

Alternate Task Order COR (Alt TOCOR): Rosella O'Connor, oconnor.rosella@epa.gov PH 212-637-3823

Contracting Officials responsible for administering this contract are as follows:

Contracting Officer: Lawrence Edelman, US EPA. Cincinnati Acquisition Division, 26 W MLK Dr. MS W136A, Cincinnati, Ohio 45268 edelman.lawrence@epa.gov

PERFORMANCE WORK STATEMENT

TSAWP IDIQ MULTIPLE-AWARD CONTRACT SOLICITATION PR-R2-19-00265

SADDLE RIVER WATER QUALITY MODELING PROJECT IN NJ WMA 4

Task Order Contracting Officer Representative (TOCOR)

Antony Tseng

tseng.antony@epa.gov

212-637-3777

Alternate TOCOR

Rosella O'Connor

oconnor.rosella@epa.gov

212-637-3823

Period of Performance

Base Period: Award to 07/15/2020

Option Period 1: 07/16/2020 to 07/15/2021

Option Period 2: 07/16/2021 to 07/15/2022

A. Background

Project Purpose: The Saddle River project is a water quality modeling effort initiated by the New Jersey Department of Environmental Protection's Bureau of Environmental Analysis, Restoration and Standards (NJDEP BEARS). This objective of the work is to set up the hydrologic, hydrodynamic and water quality model for the Saddle River (Bergen County, NJ) and simulations can be run to develop the TMDL to resolve existing water quality parameter impairments and to protect waters from degradation within the watershed.

Impairment/Dischargers: The non-tidal Saddle River consists of eight HUC14s/Assessment Units (AUs). Six of these assessments units are listed as impaired for total phosphorus (TP) on the 2014 303(d) list. Other pollutant impairments include Total Dissolved Solids (TDS), Nitrate (NO₃), Total Suspended Solids (TSS), Arsenic, pH, PCBs, Dioxin, and Cause Unknown-Aquatic Life. To-be-developed TMDL are expected to address six TP and one NO₃ impairments. With the reductions to be assigned to restore water quality, thirteen parameter-HUC 14 combination units currently attaining water quality standards would be protected from any potential degradation.

There are two surface water municipal NJPDES discharges, Northwest Bergen County Utility Authority and Ridgewood Village DPW within the watershed. Based on the outcome of the water quality modeling derived TMDL, both wastewater treatment facilities may receive new effluent limits on TP, nitrogen/ammonia and TSS. The watershed also contains a water diversion intake on the Upper Saddle River that diverts water to the Oradell Reservoir watershed to the east.

Former Project Status: To build the dynamic model, the Department and USGS collected samples from various monitoring sites in 2008 and 2009, including supplemental grab sampling during the growing season (May through September), sediment oxygen demand measurement, and continuous water quality monitoring at selected sites throughout the watershed. The Northwest Bergen County Utilities Authority and the Ridgewood Village DPW cooperatively collected 24-hour composite effluent samples during the synoptic sampling events. The Department has assembled the input files (e.g weather data, flow, water quality, and facility effluent/diversion data) to feed and run HydroWAMIT, a hydrodynamic and NPS loading model. But HydroWAMIT is facing discontinued support, which subsequently led to the submission of this project request. Previously assembled data can be used by reformatting to fit the need of to-be-selected new model.

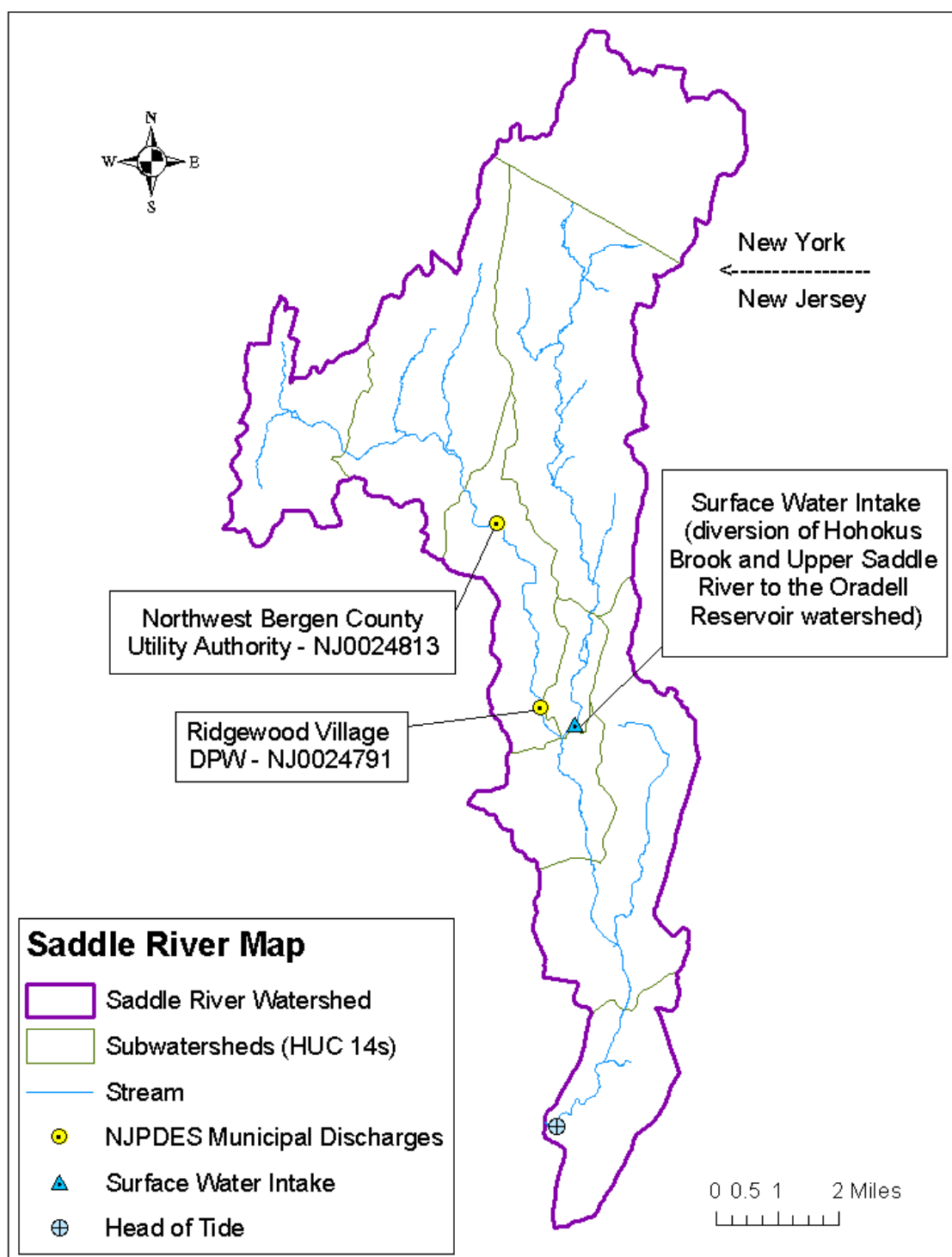


Figure 1: Map of Saddle River for Water Quality Model Development

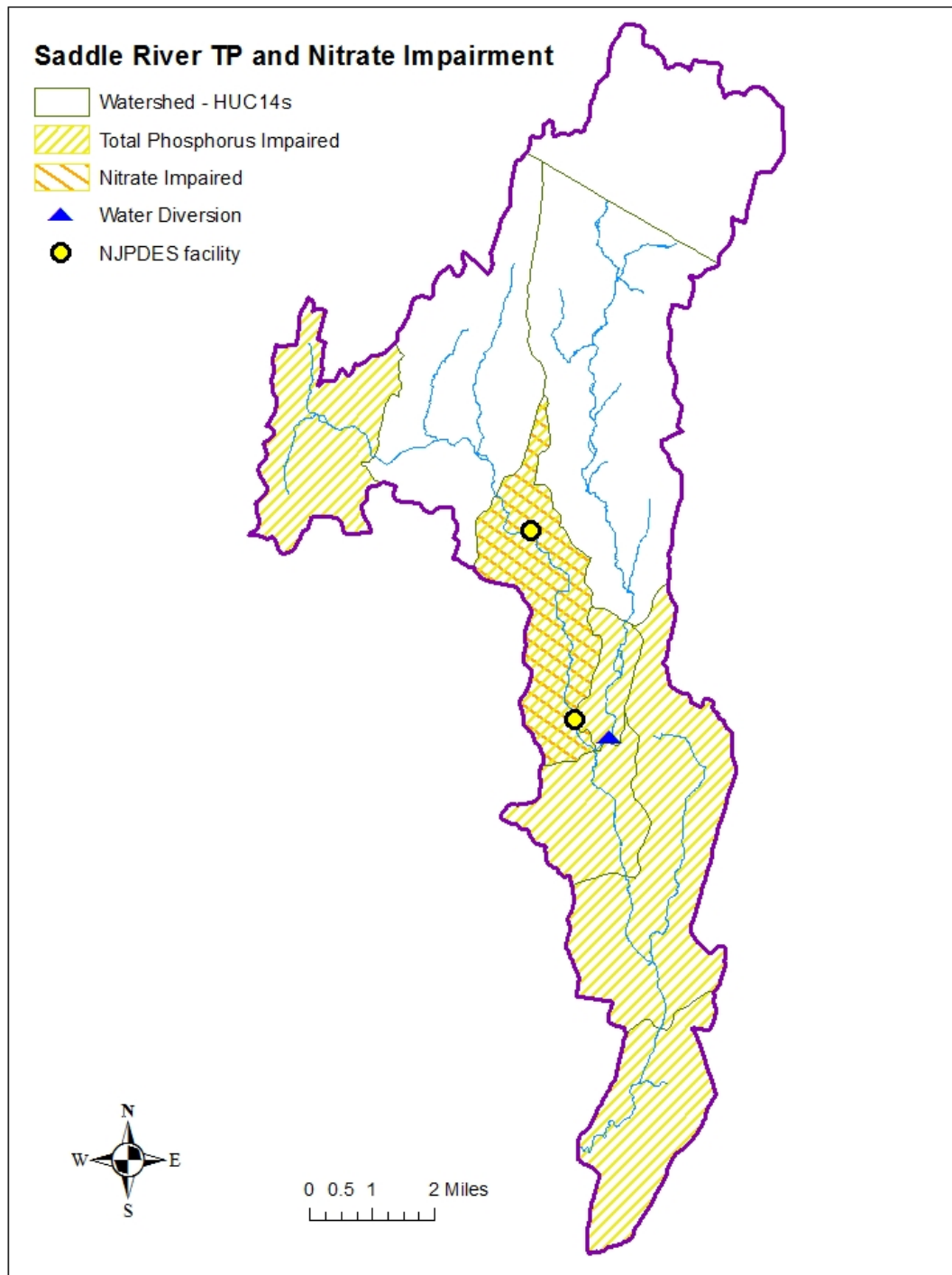


Figure 2: TP and Nitrate Impairments based on 2014 303(d) list

B. Tasks

SPECIAL POINTS OF INTEREST

All deliverables developed at any time in this Task Order must be provided to the TOCOR in electronic formats that is supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. Deliverables include all geodatabases, Excel files, Word documents, model input/export files and results and the actual model, including all codes, PowerPoint presentations and electronic copies of all reference materials used or created for this project. GIS data must be in ArcGIS format.

Electronic deliverables can be transmitted to EPA using a secure online location, data CD, data DVD, USB flash drive, and/or an external USB drive. All data not obtained electronically shall be scanned by the contractor for this purpose.

*All GIS and TMDL allocation deliverables will be accompanied by an electronic crosswalk table or GIS layer based on NHDPlus Version 2's NHDPlusCatchment layer. The NHDPlus Website for NHDPlus Version 2 can be found at:
http://www.horizon-systems.com/NHDPlus/NHDPlusV2_data.php.*

*The expression of loads in all the deliverables shall be in daily loads, unless otherwise indicated. The contractor is referred to the draft document entitled "Options for Expressing Daily Loads in TMDLs" dated June 22, 2007, for further technical guidance:
http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2007_06_26_tmdl_draft_daily_loads_tech-2.pdf.*

The contractor should allow for a 30-day turn-around time by EPA's Quality Assurance officer to review and provide comments of all draft QAPP submissions and approval of final QAPP submissions.

Task 1: Base Year - Modeling QAPP

The contractor shall use HSPF through BASINS 4.5 as the water quality model for this Task Order.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in Task 2 and 3 of this task order. The contractor shall submit for review and approval the QAPP to the TOCOR and the EPA QA Officer to be specified by the TOCOR. The contractor shall allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003 at http://www.epa.gov/quality/qa_docs.html).

The contractor shall include documentation of the application of QA and QC activities in their monthly status reports to the TOCOR.

Task 2: Base Year – Model Calibration and Model Runs

The contractor shall participate in monthly conference calls with the TOCOR and NJDEP. The TOCOR shall setup the conference line. The TOCOR may provide technical direction to cancel or postpone a conference call.

The contractor shall make an itemized request of NJ-specific data they need and assumptions that can be made if data is not available to use HSPF through BASINS 4.5 as the water quality model to complete this task to the TOCOR. Upon receipt of the data or feedback that data is not available, the contractor shall calibrate the HSPF model for the Saddle River watershed described in the figures above through BASINS 4.5. The contractor shall produce a technical memorandum to the TOCOR describing the calibration results/plots, data used, and assumptions made. The contractor shall also make all the modeling input and output files available through a secure online location to the TOCOR that were used for the calibration.

The TOCOR will use technical direction to request another calibration run based on review of the contractor's calibration technical memorandum, at the discretion of the TOCOR, and submit the results to the TOCOR for review with an updated calibration technical memorandum.

The TOCOR will use technical direction to accept the calibration of the model.

Upon acceptance of the model, the contractor will:

- Run a sensitivity analysis which are model runs to differentiate the affects of point sources versus nonpoint sources versus boundary conditions versus non-anthropogenic sources to water quality.
- Determine load capacity of the receiving waters to meet the criteria of TP (0.1 mg/L all the time) and NO3 (monthly average less than 10 mg/L).
- Propose an allocation strategy to distribute the load capacity among point sources, nonpoint sources, margin of safety, and future growth. The allocation process can include (list from 1999 Protocol for Developing Nutrient TMDLs (841-B-99-007)):
 - o Economics
 - o Political considerations
 - o Feasibility
 - o Equitability
 - o Types of sources and management options
 - o Public involvement
 - o Implementation
 - o Limits of technology
 - o Variability in loads, effectiveness of BMPs

After review of the sensitivity analysis, load capacity and proposed allocation strategy, the TOCOR will give technical direction for the contractor to provide 2 model runs of vary allocation scenarios to meet the load capacity of the receiving waters. If another calibration run was not requested before the TOCOR accepted the calibration of the model, then TOCOR at this point will give technical direction to provide 3 model runs of varying allocation scenarios to meet the load capacity of the receiving waters. The contractor shall provide the TOCOR with a

technical memorandum of the results of the model runs and make all the modeling input and output files available through a secure online location to the TOCOR.

The contractor shall submit all data (e.g. GIS, spreadsheets, modeling input and output files, memorandums, etc.) to the TOCOR upon completion of the above deliverables. The data must also be accompanied by an inventory list describing all the data used.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for GIS created/edited under this Task Order and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

Task 3: Option Year 1 – Additional Model Runs

The TOCOR will provide the contractor a technical direction for 3 model runs at varying allocation scenarios. The TOCOR may request the 3 model runs individually (i.e. three technical directions at different times with one model run for each technical direction). The contractor will provide a technical memorandum for each of the modeling results.

Task 4: Option Year 2 – TMDL support document

The contractor shall develop a TMDL support document based on the allocation scenario determined by the TOCOR with a comprehensive implementation plan. For the purposes of cost estimation, the contractor should anticipate the allocation scenario is different than the allocation scenarios from the previous tasks and therefore a model run will need to be completed. The comprehensive implementation plan shall include, but is not limited to, the following:

- Direct links to implementation to the TMDL allocations through the use of:
 - The nine elements required in 319 watershed plans.
 - Specify which BMPs meet which applicable NPS Objectives
 - Specify which BMPs address which pollutants of concern
 - Specify which set of BMPs will target to meet which applicable water quality standard
- Cost analysis for each recommended BMPs versus percent reduction of pollutant load.
- A display of implementation phases using the adaptive implementation approach with suggested steps that include monitoring and assessing as well as information on projected outcomes based on time and sequence of the order BMPs would be implemented.

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order. The contractor shall provide to the TOCOR all the project files from this task and an electronic library of the documents that were relied upon to develop the TMDL support document.

C. Schedule Of Benchmarks & Deliverables

All deliverables developed at any time in this work must be provided to the TOCOR in electronic formats that can be supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. All electronic deliverables must also be in a format that can be supported by EPA after the end of the Reports must be of high quality and 508 complaint: Work must reflect a high level of technical proficiency and be clearly explained and documented. The contractor shall include a certification of 508 compliance with each final electronic deliverable (see Section G).

Task No.	Deliverable	Schedule
1 (Base Year)	1.1 Modeling QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	1.2 QA/QC	Monthly status report of the application of QA and QC activities.
2 (Base Year)	2.1 Monthly calls	Monthly participation
	2.2 Request of data	Itemized request of NJ-specific data they need and assumptions that can be made if data is not available to the TOCOR within <u>30</u> calendar days of the approval of the Task Order QAPP.
	2.3 Calibration memo	A technical memorandum to the TOCOR describing the calibration results/plots, data used, and assumptions made to the TOCOR within <u>60</u> calendar days of the TOCOR responding to the contractor's request of data.
	2.4 Calibration files	Modeling input and output files from the model calibration to the TOCOR on the same day as the transmittal of the Calibration memo to the TOCOR.
	2.5 Updated calibration	Updated calibration technical memorandum, if requested by the TOCOR by technical direction, within <u>30</u> calendar days of TOCOR's request.
	2.6 Analysis & Strategy	Sensitivity analysis, load capacity, and allocation strategy to the TOCOR within <u>30</u> days of the TOCOR's acceptance of the calibration of the model.
	2.7 Model runs	Technical memorandum of the results of the model run to the TOCOR within <u>30</u> days of each request by the TOCOR by technical direction from the TOCOR.
	2.8 Model files	Modeling input and output files to the TOCOR on the same day as the transmittal of each model run memo to the TOCOR.
	2.9 Project files	Transfer of project files with inventory list to the TOCOR within <u>30</u> days of the end of the base year of this Task Order.

Task No.	Deliverable	Schedule
3 (Option Year 1)	3.1 Model runs	Technical memorandum of the results of the model run to the TOCOR within <u>30</u> days of each request by the TOCOR by technical direction from the TOCOR.
	3.2 Model files	Modeling input and output files to the TOCOR on the same day as the transmittal of each model run memo to the TOCOR.
	3.3 Project files	Transfer of project files with inventory list to the TOCOR within <u>30</u> days of the end of the base year of this Task Order.
4 (Option Year 2)	4.1 TMDL deliverable	Draft deliverable within 6 months of the start of the Option Year. Final deliverable within <u>1</u> month of receipt of comments
	4.2 Electronic Library	Final deliverable within <u>11</u> months of award

D. Validation Of Section 508 Compliance Of Task Order Deliverables

The Contractor shall support the TOCOR in conducting a “Final Deliverable Validation” to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to “electronic and information technology (EIT) deliverables”. The Contractor shall furnish certification, in writing, to the TOCOR that the Contractor has complied with EPAAR Clause 1552.211-79 “Compliance with EPA Policies for Information Resources Management”, including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>.

E. Notification Of Completion Of Task Order Deliverables

In the event the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period, and the contractor assesses that the contractor will not be able to satisfactorily complete any of the benchmarks, milestones, or deliverables by the end of the Performance Period, the contractor shall notify the TOCOR and the Contracting Officer (CO) immediately, in writing. Within five (5) business days of said notification, the TOCOR, in coordination with the CO, will provide technical direction concerning use of the remaining funding to prepare and furnish to the TOCOR: draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

F. Contractor Identification

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency’s official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

G. Conference/Meeting Support Guidance

No individual event is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer, PO and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

H. Quality Assurance Surveillance Plan: Per contract requirements.

I. Technical Direction

The Contract level COR or an authorized individual is permitted to provide technical direction. Technical direction must be within the statement of work of the contract and includes: (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work, (2) Comments on and approval of reports or other deliverables. Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the Contract Level Contracting Officer Representative.

J. Travel

All travel under this Task Order shall be in compliance with contract requirements and only according to specific Technical Direction provided by the TOCOR or Contracting Officer.

K. Attachments:

Appendix A: Required Elements of a TMDL Support Document

APPENDIX A

Required Elements of a TMDL Support Document

1. Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking
 - A. Description of Waterbody and Background Information
 - B. Pollutant of Concern
 - C. Pollutant Sources
 - D. Priority Ranking
 - E. Expressing the TMDL through Surrogate Measures, if applicable
2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target
3. Loading Capacity - Linking Water Quality and Pollutant Sources
 - A. Loading Capacity
 - B. Cause-and-Effect Relationship between Numeric Target and Pollutant
 - C. Critical Condition(s)
4. Load Allocations (LAs)
5. Wasteload Allocations (WLAs)
6. Margin of Safety (MOS)
7. Seasonal Variation
8. Reasonable Assurance
9. Monitoring Plan to Track TMDL Effectiveness
10. Implementation Plan
11. Index of the Administrative Record

**TASK ORDER SOLICITATION TECHNICAL EVALUATION
PR-R2-19-00265**

Saddle River Water Quality Modeling Project in NJ WMA 4

Contractors shall limit their responses to 5 pages or less, using their discretion on which criteria to place emphasis. Proposals will be evaluated on the criteria listed below by the project Technical Evaluation Team on a pass/fail basis. Award will be based on selection of the technically acceptable proposal with the lowest evaluated cost/price.

The following elements and acceptability criteria will be used in the technical evaluation of Task Order proposals:

#	Element	Acceptability	Pass	Fail
1	Development and application of water quality models that have been applied to a range of waterbody types, pollutant types, and loading sources.	Offerors must demonstrate successful completion watershed-scale TMDLs of 2-TP (total phosphorus) TMDLs and 2-NO3 (nitrate) TMDLs that require calibration and scenario analysis with HSPF in BASINS. If developed for states, the TMDLs must be approved by EPA. If established for EPA, the TMDLs must have met all regulatory requirements.		
2	Experience in complex water budgets	Offerors must demonstrate successful completion of 3 TMDLs involved a water diversion intake from a watershed in the study to a watershed not in the study. If developed for states, the TMDLs must be approved by EPA. If established for EPA, the TMDLs must have met all regulatory requirements.		

COST PROPOSAL INSTRUCTIONS
TASK ORDER SOLICITATION
PR-R2-19-00265

The following paragraphs supplement the instructions set forth in the contract clause B-1 "Ordering Procedures". These instructions apply to the prime contractor as well as subcontractors and consultants. It is the prime contractor's responsibility to ensure that all instructions are disseminated to subcontractors and consultants.

Contractors shall submit a summary page for the base and any optional periods. The summary sheet shall be supplemented as necessary to provide thoroughness and clarity in the data presented. Pricing detail shall be included by task for the base and any optional periods. The cost breakdown supporting the above documents shall breakout the following elements: Direct Labor, including direct labor rate and hours for each proposed individual, Fringe Benefits, Overhead, ODC, Travel, Consultants, Subcontractors, Total Subcontract, Subtotal, G&A, Total Cost, Fee, Total Cost Plus Fee. This cost detail shall be broken out for the base and any optional periods, at the task level. A copy of the cost proposal shall be included in the submission in MS Excel. This copy shall include formulas used to arrive at the CPFF for the base and any optional periods in addition to the aggregate amount for each period.

When subcontract effort is included in the cost proposal, the prime contractor shall submit charts for each contract year and for the aggregate (all years, all hours) which clearly indicate the exact allocation of the specified level of effort among the prime contractor and the proposed subcontractors. Specified labor categories as well as job titles within the labor categories should be identified. Subcontractor detail may be provided by the subcontractor directly to the EPA.

If a proposed subcontractor does not have an approved accounting system (one that is considered adequate for use on Government cost-type contracts), the Contracting Officer's consent for a cost type (CPFF, etc.) subcontract will not be granted.

In the cost proposal, the contractor must certify that all proposed personnel (including proposed subcontractor personnel or consultants) for the Professional Level identified by the contractor meet the qualifications specified in the Contract at Attachment 3.